PRODUCT DATASHEET

Adsorption-Resin and Flash-Chromatography Purification Skid

Resin columns and flash chromatography to purify curcuminoids, stevia, polyphenols and other botanical actives

Product page





Close-up: resin columns and fraction manifold

OVERVIEW

The Tech Inc. Adsorption-Resin and Flash-Chromatography Purification Skid purifies botanical extracts by passing them through columns of adsorbent resin. The active compounds stick to the resin while sugars, salts and colour pass through; a change of solvent then releases the actives as a cleaner, more concentrated fraction.

TYPICAL DESIGN DATA

Bed volume	About 10 to 2,000 L per column
Pressure	Up to about 6 bar for resin; about 20 bar for flash
Materials	316L stainless, electropolished on request
Codes and standards	Pressure parts to the client's specification; electrical to IEC 60204-1; flameproof build for ethanol areas on request
Solvents	Water, ethanol and their mixtures; others on request
Detection	UV, conductivity and pH
Control	PLC with gradient, fraction and CIP recipes

MODELS AND CAPACITIES

- **TI-RPS-10** – about 10 L bed (pilot)
- **TI-RPS-100** – about 100 L bed
- **TI-RPS-500** – about 500 L bed
- **TI-RPS-2000** – about 2,000 L bed (production)

Indicative bed volume.

ORDERING CODE

Example **TI-RPS-100-3**: **100** bed volume per column, L; **3** number of columns.

SCOPE OF SUPPLY

Included: factory acceptance test with a written report; drawings for approval, material certificates and manual. **Options:** flameproof (Ex) build; SMB control package; inline HPLC sampling port; resin screening trials.

KEY ADVANTAGES

- **Higher purity** – stated active content
- **Reusable resin** – regenerated in place
- **Food-grade solvents** – water and ethanol
- **Scales cleanly** – pilot to production

Designed and built by Tech Inc. · **Part of the Davey Group since 1990**

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